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   1 ctcgcgttag gcaggtgaca gcagggacat gtctcgggag atgcaggatg tagacctcgc
  61 tgaggtgaag cctttggtgg agaaagggga gaccatcacc ggcctcctgc aagagtttga
 121 tgtccaggag caggacatcg agactttaca tggctctgtt cacgtcacgc tgtgtgggac
 181 tcccaaggga aaccggcctg tcatcctcac ctaccatgac atcggcatga accacaaaac
 241 ctgctacaac cccctcttca actacgagga catgcaggag atcacccagc actttgccgt
 301 ctgccacgtg gacgccctg gccagcagga cggcgcagcc tccttccccg cagggtacat
 361 gtaccctcc atggatcagc tggctgaaat gcttcctgga gtccttcaac agtttgggct
 421 gaaaagcatt attggcatgg gaacaggagc aggcgcctac atcctaactc gatttgctct
 481 aaacaaccct gagatggtgg agggccttgt ccttatcaac gtgaaccctt gtgcggaagg
 541 ctggatggac tgggccgcct ccaagatctc aggatggacc caagctctgc cggacatggt
 601 ggtgtcccac cttttgggga aggaagaaat gcagagtaac gtggaagtgg tccacaccta
 661 ccgccagcac attgtgaatg acatgaaccc cggcaacctg cacctgttca tcaatgccta
 721 caacagccgg cgcgacctgg agattgagcg accaatgccg ggaacccaca cagtcaccct
 781 gcagtgccct gctctgttgg tggttgggga cagctgcct gcagtggatg ccgtggtgga
 841 gtgcaactca aaattggacc caacaaagac cactctcctc aagatggcgg actgtggcgg
 901 cctccgcag atctcccagc cggccaagct cgctgaggcc ttcaagtact tcgtgcaggg
 961 catgggatac atgccctcgg ctagcatgac ccgcctgatg cggtcccgca cagcctctgg
1021 ttccagcgtc acttctctgg atggcacccg cagccgctcc cacaccagcg agggcacccg
1081 aagccgctcc cacaccagcg agggcacccg cagccgctcg cacaccagcg aggggcccca
1141 cctggacatc accccccaact cgggtgctgc tgggaacagc gccgggccca agtccatgga
1201 ggtctcctgc taggcggcct gcccagctgc cgcccccgga ctctgatctc tgtagtggcc
1261 ccctcctccc cggcccctt tcgcccctg cctgccatac tgcgcctaac tcggtattaa
1321 tccaaagctt attttgtaag agtgagctct ggtggagaca aatgaggtct attacgtggg
1381 tgccctctcc aaaggcgggg tggcggtgga ccaaaggaag gaagcaagca tctccgcatc
1441 gcatcctctt ccattaacca gtggccggtt gccactctcc tcccctccct cagagacacc
1501 aaactgccaa aaacaagacg cgtagcagca cacacttcac aaagccaagc ctaggccgcc
1561 ctgagcatcc tggttcaaac gggtgcctgg tcagaaggcc agccgcccac ttcccgtttc
1621 ctctttaact gaggagaagc tgatccagtt ccggaaaca aaatccttt ctcatttggg
1681 gagggggta atagtgacat gcaggcacct ctttaaaca ggcaaaacag gaagggggaa
1741 aaggtgggat tcatgtcgag gctagaggca tttggaacaa caaatctacg tagttaactt
1801 gaagaaaccg attttttaaag ttggtgcatc tagaaagctt tgaatgcaga agcaaacaag
1861 cttgattttt ctagcatcct cttaatgtgc agcaaaagca ggcgacaaaa tctcctggct
1921 ttacagacaa aaatatttca gcaaacgttg ggcatcatgg ttttttgaagg ctttagttct
1981 gctttctgcc tctcctccac agccccaacc tcccacccct gatacatgag ccagtgatta
2041 ttcttgttca gggagaagat catttagatt tgttttgcat tccttagaat ggagggcaac
2101 attccacagc tgccctggct gtgatgagtg tccttgcagg ggccggagta ggagcactgg
2161 ggtggggtg gaattggggt tactcgatgt aagggattcc ttgttgttgt gttgagatcc
2221 agtgcagttg tgatttctgt ggatcccagc ttggttccag gaattttgtg tgattggctt
2281 aaatccagtt ttcaatcttc gacagctggg ctggaacgtg aactcagtag ctgaacctgt
2341 ctgacccggt cacgttcttg gatcctcaga actctttgct cttgtcgggg tgggggtggg
2401 aactcacgtg gggagcggtg gctgagaaaa tgtaaggatt ctggaataca tattccatgg
2461 gactttcctt ccctctcctg cttcctcttt tcctgctccc taacctttcg ccgaatgggg
2521 cagcaccact gacgtttctg ggcggccagt gcggctgcca ggttcctgta ctactgcctt
2581 gtactttca ttttggctca ccgtggattt tctcatagga agtttggtca gagtgaattg
2641 aatattgtaa gtcagccact gggacccgag gatttttggg accccgcagt tgggaggagg
2701 aagtagtcca gccttccagg tggtgtgaga ggcaatgact cgttacctgc cgcccatcac
2761 cttggaggcc ttccctggcc ttgagtagaa aagtcgggga tcggggcaag agaggctgag
2821 tacggatggg aaactattgt gcacaagtca ttccagagga gtttcttaac gagatatttg
2881 tatttatttc cagaccaata aatttgtaac tttgcaaaaa aaaaaaaaa aaaaaaaaa
2941 aaaaaaaaa aaaaaaaaa aaaaaaaaa aa
```

**FIG. 1A**

```
  1 msremqdvdl aevkplvekg etitgllqef dvqeqdietl hgsvhvtlcg tpkgnrpvil
 61 tyhdigmnhk tcynplfnye dmqeitqhfa vchvdapgqq dgaasfpagy mypsmdqlae
121 mlpgvlqqfg lksiigmgtg agayiltrfa lnnpemvegl vlinvnpcae gwmdwaaski
181 sgwtqalpdm vvshlfgkee mqsnvevvht yrqhivndmn pgnlhlfina ynsrrdleie
241 rpmpgthtvt lqcpallvvg dsspavdavv ecnskldptk ttllkmadcg glpqisqpak
301 laeafkyfvq gmgympsasm trlmrsrtas gssvtsldgt rsrshtsegt rsrshtsegt
361 rsrshtsega hlditpnsga agnsagpksm evsc
```
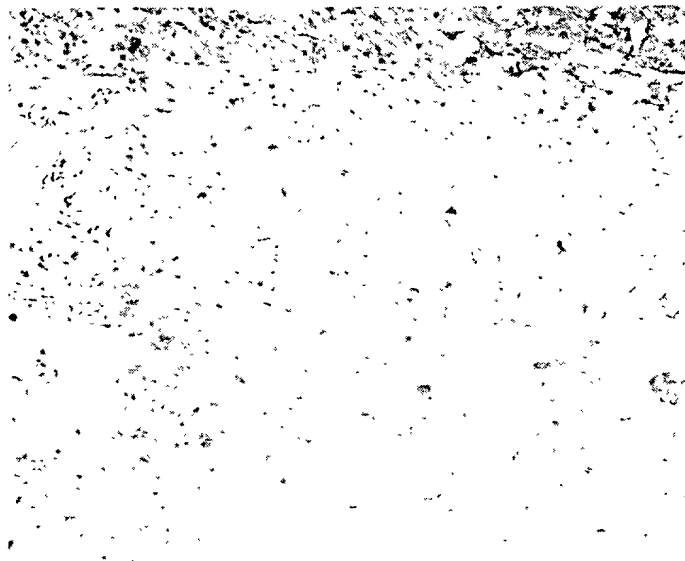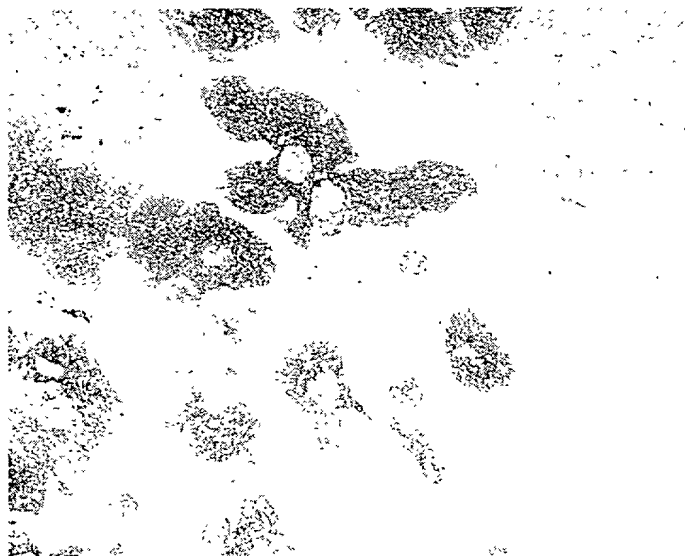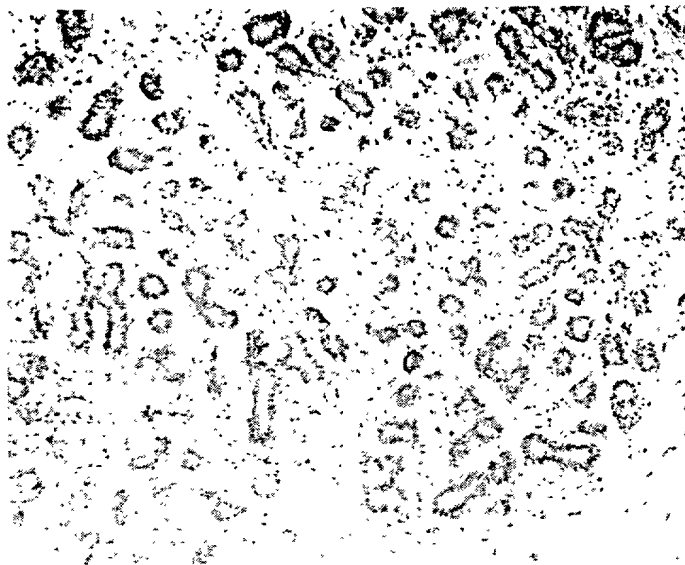
**FIG. 1B**

**FIG. 2A**



**FIG. 2B**

FIG. 3A
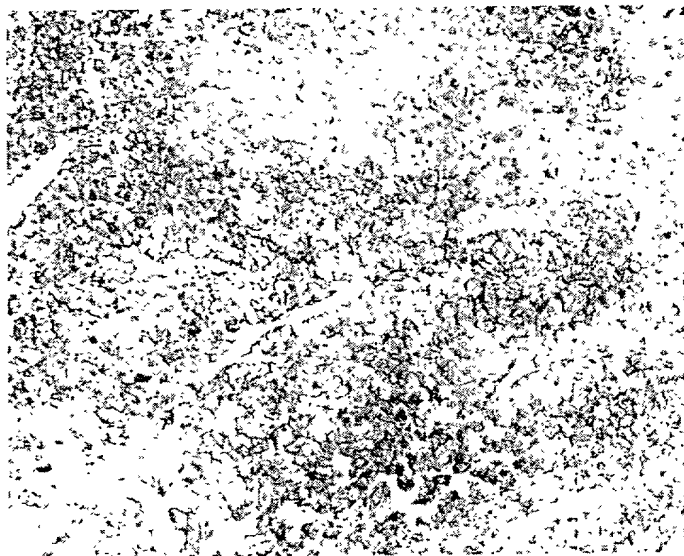


FIG. 3B
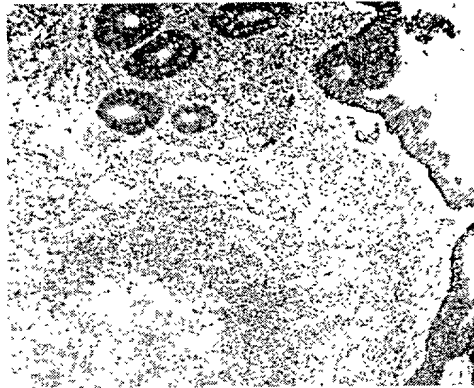
**FIG. 4A**
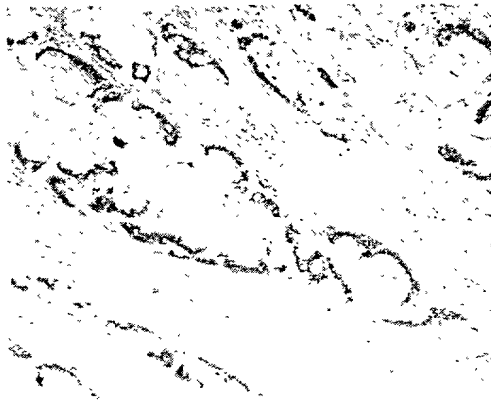


**FIG. 4B**
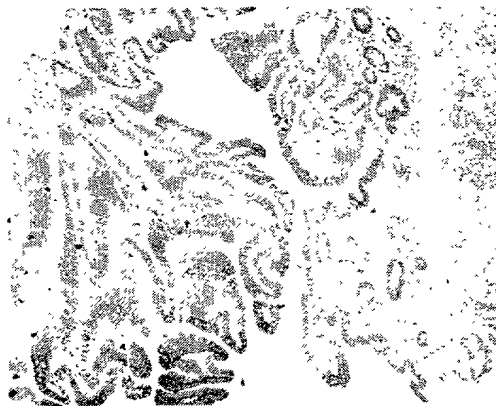


**FIG. 4C**
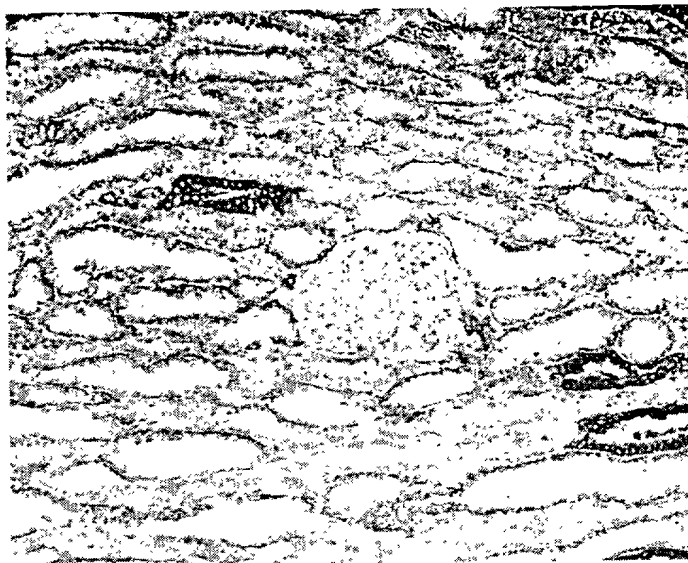
**FIG. 5A**
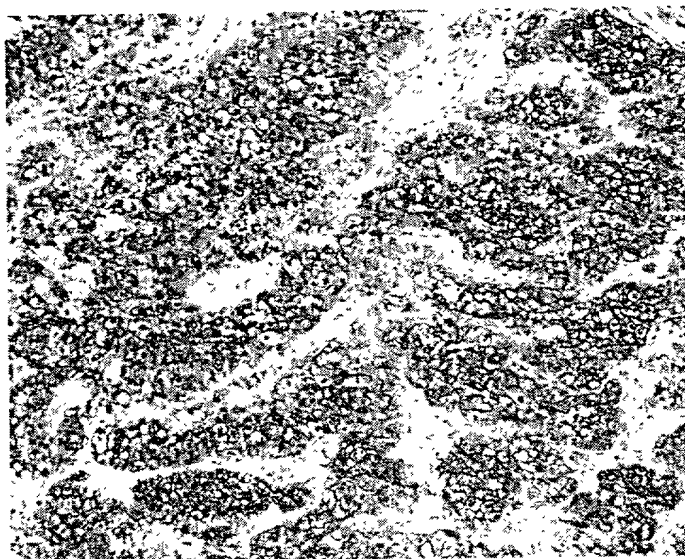


**FIG. 5B**

**FIG. 6A**
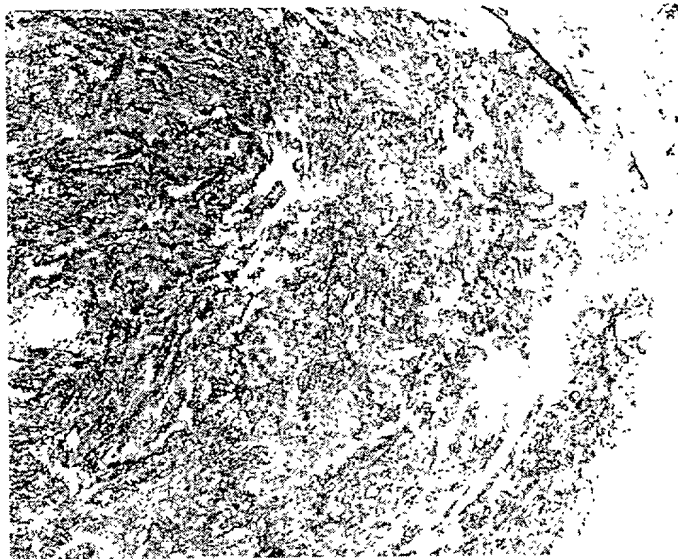


**FIG. 6B**
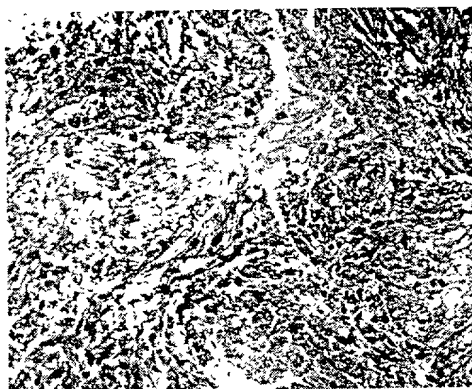
**FIG. 7A**



**FIG. 7B**
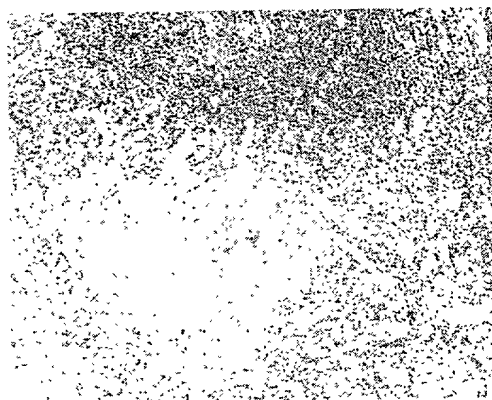


**FIG. 7C**
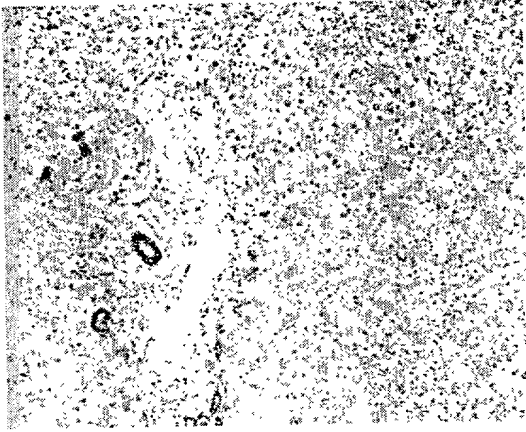
FIG. 8A



FIG. 8B



FIG. 8C



FIG. 8D

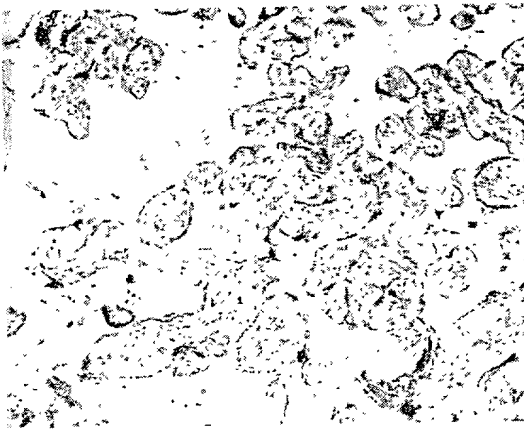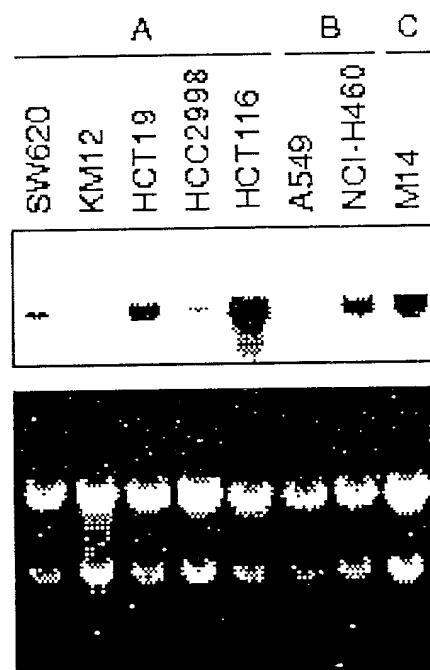|       |      |       | A       |        | B   | B        | C   |
|-------|------|-------|---------|--------|-----|----------|-----|
| SW620 | KM12 | HCT19 | HCC2998 | HCT116 | A549 | NCI-H460 | M14 |
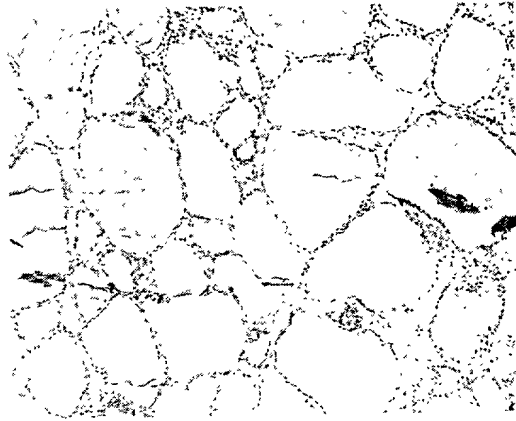
A - Colon Carcinomas

B - Lung Adinocarcinomas

C - Melanomas

**FIG. 9**

```
tttcatcttt tttgtagaga tgggacatca ctatgttgtg aaggctggtc tcaaactcct        60
ggactcaaga gaggcttctg cattggcctc ccaaagtgct gggattacag gtgtaagcca       120
ctctacctgg acacaacatt ttatttgaaa taagaaaaat tttccctcac tgggaatgct       180
gcagttgaac tagttcaaat ccataaagaa tggaagactc cccagtggtc attcattcac       240
ttattaattc tagatgttaa attttctagg gtggggggaat gtgctcctac attcaaggca      300
ttcttgaatg tagccaaact ttgtagttta gccaaacttc atagctaata gccaaacttt       360
gtagtttagc caaactcttc tagcagcaaa acccatgaca ctggaactct gttcttcaca       420
ctggtcattt gtaatagaat aacagagctt tagcactaga taggttctga aagatcattg       480
aatctaatcc tctccctttg ccagtgagaa ttctgaagcc cagatttgtt gatttgtgat       540
cgatagtgtc aaagacaggc ctgaaacaca gatgtcctgg gtcctagagg tgctgtttgc       600
ccctctccat atttcttttg ttccagaaaa cccttctcca aaactggccc taataatcag       660
aggggaaagc catggcccct gccttgggga cagcatgggg tggcacagaa aagaggttta       720
caattcagca ggaagtgttg tgcgtgcgcg cgtgtgtgtc tgtggaggcg cagggagggt       780
cacctgagct tgccctgggt ctggtcctgg gctcagtggc aaattcaacg ctgggcaggt       840
ggcctgagga caatgacggt gccagctgtg agtcagactt cctttattca taaaatcatg       900
ttcctccatg cagtgcttct caacctggct gcacgtcagg agccacctgg gtagctttgt       960
aaaaacccca atgcccagtt ggtttgcacc ccctgagatt ctgattaaac tgttctggag      1020
tccatctctc tcttttttatt atctatctat ttatttattt tttaatttgg cggctcctct     1080
gggacttctc atatgcagta ggggttgaga attgctggtt tctttggcca gatgggaaca      1140
tgcaggccaa tagttacgca caaacagagc agcagagcag gacggtgcta aggttggaaa      1200
gggtgagtca tgaaagttca ggaaatcaga ataggaaggg gtgagaatcc tctcatctgg      1260
gcttgtgggg caggagagaa gagcccagtg ggcaaggtcc agtgagtgtg cttagaactg      1320
ggaagatgag gggaagggta agcgctgggc ggcggtgggc aatatggacg agattaaacg      1380
ggagcgagga tttcagcgag agctttggcg cacggaagg ctgagaatcg gagggagcct       1440
gtcaggcgaa agcgaaggcg gctgctgggc aggcagccga atccggctgg agagccgagc      1500
tggtgagacc tacaggaagt gaagggagtc gctcaggcg tggcgcaacg agactcttag       1560
aagaaactct gaggcagaga tgggggggcct ccgcccatac ggagacacaa ggaagtccac     1620
atgcacacgc acgagcgcgc acatgaacac gcacaagcac acaaacgcct cctccgggca      1680
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cccacaaccc gggccccgat gcccctcccg gccgcgcccc tacgactgct tgcgcaacag      1800
gcggcggctc cagtgggcgc ccgccgcgcg ctgccggagc ccagcccagc ccggcgcgcc      1860
cgggaggagg gagcagggag cggggaaggg gtgtgtcccg gctgcgtgct gggactgcga      1920
gggtctggga ggggcgaggc gcggggcgg ggccgcggcg cctataaagt cgccctccgc       1980
ccggacgtaa acaaacctcg cctggctccc agctggtgct gaagctcgtc agttcaccat      2040
ccgccctcgg cttccgcggg gcgctggggcc gccagcctcg gcaccgtcct ttcctttctc     2100
cctcgcgtta ggcaggtgac agcagggcAT G                                      2131
```

FIG. 10
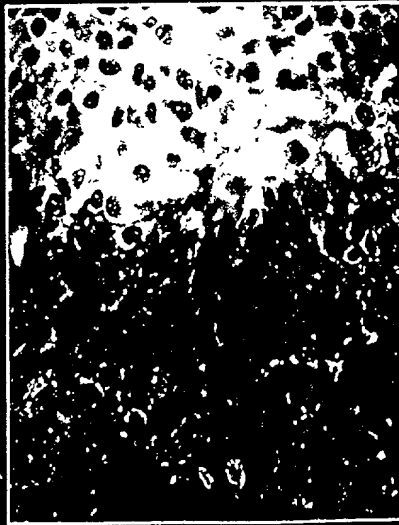
A) Lung, Adenocarcinoma

B) Brain, Normal
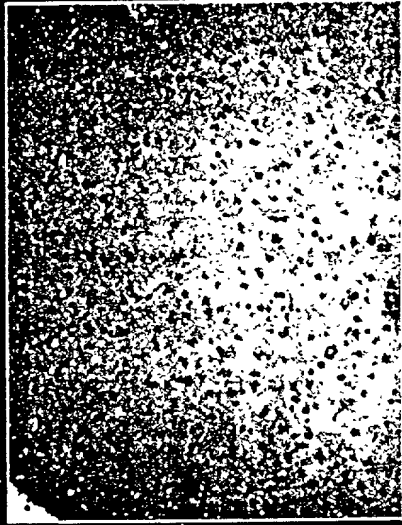
C) Brain, Glioblastoma

D) Brain, Glioblastoma
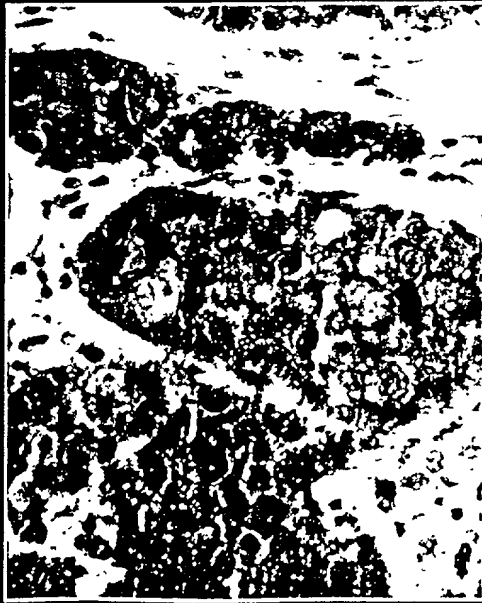
E) Melanoma

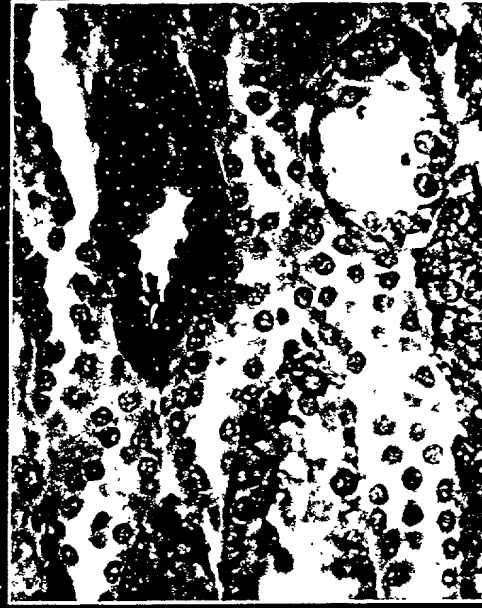F) Prostate, Hyperplastic

G) Prostate, Carcinoma

FIGS. 11A-G

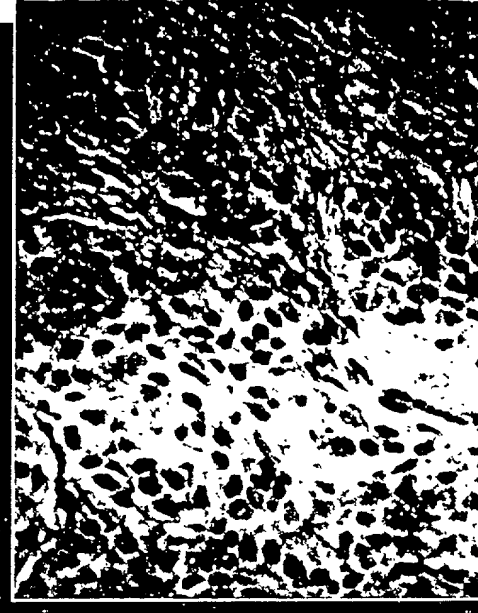H) Breast, Carcinoma

I) Kidney, Normal

J) Kidney, Carcinoma

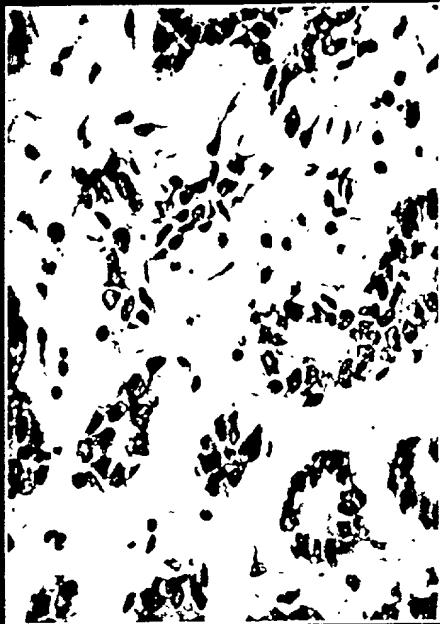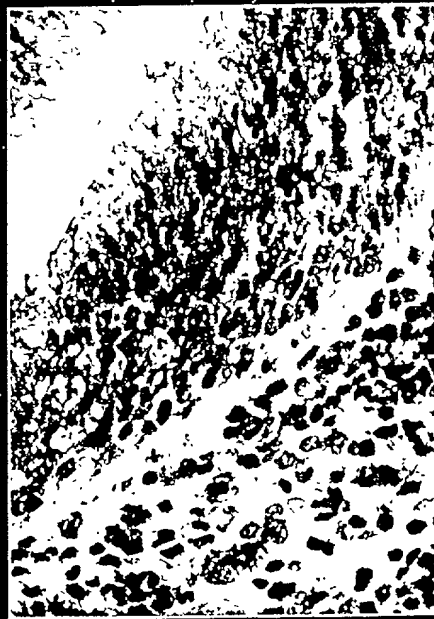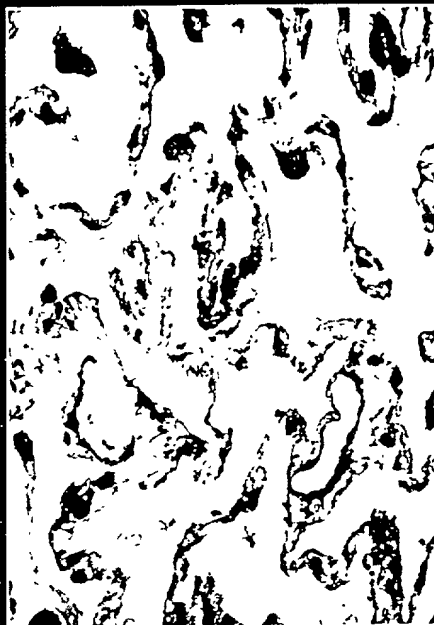K) Colon, Normal
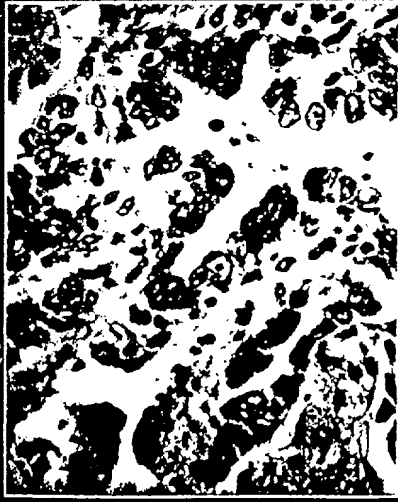
L) Colon, Adenoma
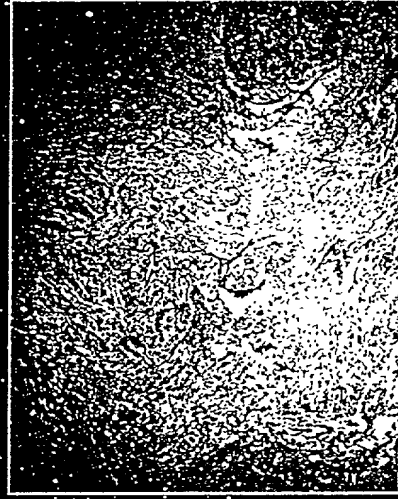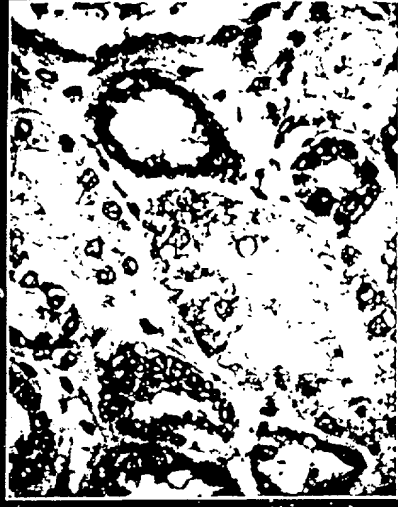
M) Skin, Nevus

FIGS. 22H-M
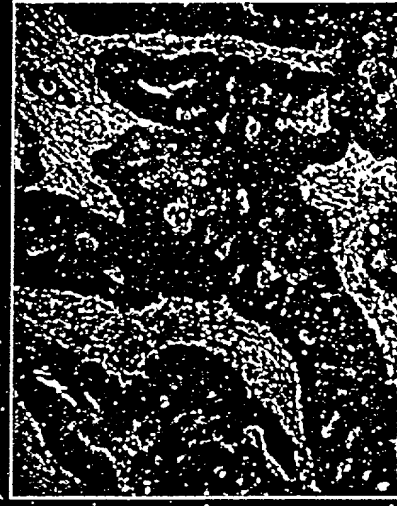
FIGS. 12A-E

A) Lung, Adenocarcinoma

B) Melanoma

C) Kidney, Normal

D) Kidney, Cancer

E) Colon, Adenocarcinoma

F) Colon, Normal

G) Brain, Glioblastoma

FIGS. 13A-G